

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Claim 1. (Canceled)

Claim 2. (Currently Amended) The ~~copolymer~~ dewaxing additive according to Claim ~~[[1]]~~ 11, wherein the proportion by weight of the monomer A in the total weight of the copolymer is 0.1-70%.

Claim 3. (Currently Amended) The ~~copolymer~~ dewaxing additive according to Claim ~~[[1]]~~ 11, wherein at least 50% of the monomers B contain alkyl radicals R⁸ of chain length greater than or equal to C₁₆.

Claim 4. (Currently Amended) The ~~copolymer~~ dewaxing additive according to Claim ~~[[1]]~~ 11, wherein the monomers of formula A consist of one or more monomers selected from the group consisting of styrene, butyl methacrylate, methyl methacrylate, ~~[[or]]~~ 2-ethylhexyl methacrylate and mixtures thereof.

Claim 5. (Currently Amended) The dewaxing additive according to Claim 11 A ~~polymer mixture comprising one or more copolymers according to Claim 1, further comprising and~~ one or more ~~further~~ homo- or copolymers which are polyalkyl methacrylates and have alkyl substituents of chain length C₁-C₂₄.

Claim 6. (Currently Amended) The dewaxing additive ~~The polymer mixture~~ according to Claim 5, wherein the ~~further~~ homo- or copolymers which are polyalkyl methacrylates have alkyl substituents of chain length C₁₂-C₁₈.

Claim 7. (Currently Amended) The dewaxing additive ~~The polymer mixture~~ according to Claim 5, wherein ~~[[the]]~~ a ratio of the copolymers and the ~~further~~ homo- or copolymers which are polyalkyl methacrylates is 1:20 to 20:1.

Claim 8. (Currently Amended) The dewaxing additive ~~The polymer mixture~~ according to Claim 5, wherein the ~~further~~ homo- or copolymer is a polyalkyl methacrylate which contains up to 20% by weight of C₁-C₁₀ methacrylates.

Claim 9. (Canceled)

Claim 10. (Canceled)

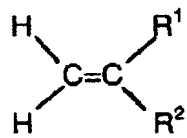
Claim 11. (Currently Amended) A dewaxing additive, comprising:

~~the copolymer according to Claim 1~~

(i) in polymerized form, the following free-radically polymerizable monomers of

Formulae A and B:

Formula A:



wherein

R¹ = H or CH₃,

R² = phenyl, benzyl, naphthyl, anthranyl, phenanthryl, N-pyrrolidonyl, N-imidazolyl,

2-pyridyl, 4-pyridyl or an alkyl-substituted aromatic substituent or

R² = COOR³ where R³ = H or R³ is a linear or branched alkyl radical of C₁-C₁₀

or

R³ is a heteroatom-substituted radical $-(CH_2)_nX$ where $X = OH$ or $X = N(R^4)_2$

wherein $n = 1-10$ and R^4 is in each case independently H or $R^4 = C_1-C_4$ -alkyl

or

R³ is $-(CH_2CH_2O)_mR^5$ wherein $m = 1-90$ and $R^5 = H$ or $R^5 = C_1-C_{18}$ or R^3 is a benzyl, phenyl or cyclohexyl radical

or

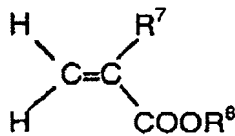
R² = $CONHR^6$ wherein $R^6 = H$ or R^6 is a linear or branched alkyl radical of C_1-C_{10}

or

R⁶ is a heteroatom-substituted radical $-(CH_2)_nX$ where $X = OH$ or $X = N(R^4)_2$

wherein $n = 1-10$ and R^4 is in each case independently H or $R^4 = C_1-C_4$ -alkyl;

Formula B:



wherein $R^7 = H$ or CH_3 and

R⁸ radical = linear or branched alkyl radicals of $C_{12}-C_{40}$, and,

optionally further (ii) a customary dewaxing additive additives.

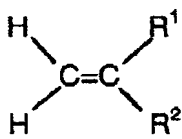
Claim 12. (Currently Amended) The dewaxing additive according to Claim 11,
~~wherein the dewaxing additive~~ which is a solution of the copolymer in an oil of the paraffinic
or naphthenic type, or in an organic solvent.

Claim 13. (Previously Presented) The dewaxing additive according to Claim 12,
wherein the organic solvent is toluene, xylene and/or naphtha.

Claim 14. (Currently Amended) A method for solvent deparaffinization of paraffinic mineral oil distillates, comprising:

adding a dewaxing additive ~~according to Claim 11~~ to said paraffinic mineral oil distillates, to obtain paraffin crystals; and
separating said paraffin crystals; a dewaxing process
wherein said dewaxing additive comprises in polymerized form the following free-radically polymerizable monomers of Formulae A and B:

Formula A:



wherein

$\text{R}^1 = \text{H}$ or CH_3 ,

$\text{R}^2 = \text{phenyl, benzyl, naphthyl, anthranyl, phenanthryl, N-pyrrolidonyl, N-imidazolyl,}$

2-pyridyl, 4-pyridyl or an alkyl-substituted aromatic substituent or

$\text{R}^2 = \text{COOR}^3$ where $\text{R}^3 = \text{H}$ or R^3 is a linear or branched alkyl radical of $\text{C}_1\text{-C}_{10}$

or

R^2 is a heteroatom-substituted radical $-(\text{CH}_2)_n\text{X}$ where $\text{X} = \text{OH}$ or $\text{X} = \text{N}(\text{R}^4)_2$

wherein $n = 1\text{-}10$ and R^4 is in each case independently H or $\text{R}^4 = \text{C}_1\text{-C}_4\text{-alkyl}$

or

R^2 is $-(\text{CH}_2\text{CH}_2\text{O})_m\text{R}^5$ wherein $m = 1\text{-}90$ and $\text{R}^5 = \text{H}$ or $\text{R}^5 = \text{C}_1\text{-C}_{18}$ or R^2 is a benzyl, phenyl or cyclohexyl radical

or

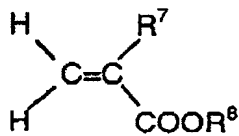
$\text{R}^2 = \text{CONHR}^6$ wherein $\text{R}^6 = \text{H}$ or R^6 is a linear or branched alkyl radical of $\text{C}_1\text{-C}_{10}$

or

R^6 is a heteroatom-substituted radical $-(CH_2)_nX$ where $X = OH$ or $X = N(R^4)_2$

wherein $n = 1-10$ and R^4 is in each case independently H or $R^4 = C_1-C_4$ -alkyl;

Formula B:



wherein $R^7 = H$ or CH_3 and

R^8 radical = linear or branched alkyl radicals of $C_{12}-C_{40}$, and,

optionally further customary dewaxing additives.

Claim 15. (Currently Amended) The method according to Claim 14, wherein the addition rate of the copolymer ~~in the dewaxing process~~ is 0.005-0.5%.

Claim 16-20. (Cancelled)

Claim 21. (New) The dewaxing additive according to Claim 11, comprising:
a copolymer of behenyl acrylate and styrene.

Claim 22. (New) The dewaxing additive according to Claim 11, comprising:
a copolymer of behenyl acrylate and at least one member selected from the group consisting of n-butyl methacrylate, isononyl methacrylate, and benzyl methacrylate.

Claim 23. (New) The method according to Claim 14, comprising:
cooling said paraffinic mineral oil distillates to below $-20^{\circ}C$, thereby crystallizing said paraffin.

Claim 24. (New) The method according to Claim 14, comprising:
adding a solvent.

Claim 25. (New) The method according to Claim 14, comprising:
adding a solvent to said paraffinic mineral oil distillates, to obtain a solvent-paraffinic mineral oil mixture;
cooling the solvent-paraffinic mineral oil mixture thereby forming paraffin crystals which form a filter cake which is porous and permeable to a solvent-mineral oil mixture; and
separating said paraffin crystals from said solvent-mineral oil mixture by filtration.

Claim 26. (New) The method according to Claim 25, wherein said paraffin crystals grow epitaxially.

Claim 27. (New) The method according to Claim 14, comprising:
adding said dewaxing additive to said paraffinic mineral oil distillates at a temperature above the cloud point of said mineral oil.

Claim 28. (New) The dewaxing additive according to Claim 11, consisting of:
a copolymer of behenyl acrylate and styrene.

Claim 29. (New) The method according to Claim 14, comprising:
adding said dewaxing additive to said paraffinic mineral oil distillates, to obtain paraffin crystals;
separating said paraffin crystals; and

Application No.: 10/505,370

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obtaining a deparaffinized mineral oil distillates.

Claim 30. (New) The dewaxing additive of Claim 11 which is suitable for solvent deparaffinization of paraffinic mineral oil distillates and which influences the size and shape of paraffin crystals obtained from the paraffinic mineral oil.

BASIS FOR THE AMENDMENT

Claims 1, 9 and 10, and 16-20 have been canceled.

Claims 11 and 14 have been rewritten in independent form. Claim 14 is further supported at pages 17 and 18 of the specification.

New Claims 21-30 have been added.

New Claims 21 and 28 are supported at page 14, last paragraph of the specification.

New Claims 23, 24, 25 and 29 are supported at page 17, lines 5-33 of the specification.

New Claim 26 is supported at page 17, last paragraph of the specification.

New Claim 27 is supported at page 18, lines 25-30 of the specification.

New Claim 30 is supported by Claim 1 as originally filed and at page 17, lines 28-33 of the specification.

No new matter is believed to have been added by entry of this amendment. Entry and favorable reconsideration are respectfully requested.

Upon entry of this amendment Claims 2-8, 11-15 and 21-30 will now be active in this application.